

## Design and manufacturing of the syncope detection and warning device in bathroom

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### \*Abstract

**Background:** Syncope or loss of consciousness in the bathroom occurs commonly amongst patients, elderly, pregnant women and sometimes occurs in healthy people. Injury from fall, fractures of the skull, brain damages, and sometimes death are of disturbing complications of syncope that often happen due to unawareness of people around.

**Objective:** The aim of this study was to design and manufacturing of the syncope detection and warning device in bathroom.

**Methods:** This paper reports the design and manufacturing of the syncope detection and warning electrical device in bathroom that have been conducted in Biomedical Technology Incubator affiliated to Qazvin University of Medical Sciences in 2013

**Findings:** This device is designed for both home and hospital use. Interaction between different parts of the device results in timely detection and warning in bathroom. After syncope, it initially warns the bather. When there is no response from the bather, it warns the people around.

**Conclusion:** This device has no domestic and foreign examples and can be an efficient device for installation in hospitals, nursing homes, dormitories, and homes.

**Keywords:** Baths, Syncope, Rescue Work

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